

Corrosion and Corrosion Control in LWRs Acronyms

AHC	access hole cover	IDSCC	interdendritic stress corrosion cracking
ANL	Argonne National Laboratory	IGA	intergranular attack
ASTM	American Society for Testing and Materials	IGSCC	intergranular stress corrosion cracking
AVT	all-volatile treatment	IRM	intermediate range monitor
BAC	boric acid corrosion	JPB	jet pump beam
BB	bent beam	KLA	knife line attack
BCC	body-centered cubic	LAS	low alloy steel
BCT	body-centered tetragonal	LPHSW	last pass heat sink welding
BHDL	bottom head drain line	LPRM	local power range monitor
BMI	bottom mounted instrument	LPSCC	low potential stress corrosion cracking
BOC	beginning of fuel cycle	LTNC™	low temperature NobleChem™
BOP	balance of plant	LWR	light water reactor
B&W	Babcock and Wilcox	MA	mill annealed
BWR	boiling water reactor	MCA	multiple crevice assembly
BWRVIA	BWR Vessel and Internals Application	MIC	microbiologically influenced corrosion
BWRVIP	BWR Vessel and Internals Project	MR	molar ratio
CAVS	crack arrest verification system	MRP	Materials Reliability Program
CBB	creviced bent beam	MSIP	mechanical stress improvement
CE	Combustion Engineering	MSLRM	main steam line radiation monitor
CERT	constant extension rate test	NG	nuclear grade
CF	corrosion fatigue	NM/NMCA	noble metal/noble metal chemical addition
CGR	crack growth rate	NWC	normal water chemistry
CILC	crud-induced localized corrosion	OE	operating experience
CL	constant load	OLNC™	on-line noble chemistry™
CP	corrosion potential	PIE	post-irradiation examination
CRB	control rod blade	PLEDGE	Plant Life Extension Diagnosis by GE
CRC	corrosion resistant cladding	ppb	part per billion
CRD	control rod drive	ppm	part per million
CRDM	control rod drive mechanism	PWR	pressurized water reactor
CS	carbon steel	PWSCC	primary water stress corrosion cracking
CSW	canopy seal weld	RCP	reactor coolant pump
CT	compact tension	RH	relative humidity
CW	cold work	RIS	radiation induced segregation
DAEC	Duane Arnold Energy Center	RPV	reactor pressure vessel
DCB	double cantilever beam	RUB	reverse U-bend
DCPD	reversing DC potential drop	RVH	reactor vessel head
dpa	displacements per atom	SCC	stress corrosion cracking
E	electrode potential	SEM	scanning electron microscope
EC	erosion corrosion	SG	steam generator
ECP	electrochemical corrosion potential	SHB	shroud head bolt
EOC	end of fuel cycle	SHE	standard hydrogen electrode
EPR	electrochemical potentiokinetic reactivation	SHT	solution heat treatment
EPRI	Electric Power Research Institute	SMAW	shielded metal arc welding
F	Faraday	SRM	short range monitor
FAC	flow-accelerated corrosion	SSRT	slow strain rate test
FCC	face-centered cubic	TEM	transmission electron microscope
FM	fracture mechanics	TGSCC	transgranular stress corrosion cracking
FLP	fiber laser peening	THP	top head penetration
FOI	factor of improvement	TSP	tube support plate
FS	furnace sensitized	TT	thermally treated
FW	feedwater	UT	ultrasonic testing
GB	grain boundary	UTS	ultimate tensile strength
GEGRC	GE Global Research Center	UHTR	upper head temperature reduction
GENE	GE Nuclear Energy	VY	Vermont Yankee
GTAW	gas-tungsten arc welding	W	Westinghouse
HAZ	heat affected zone	WJP	water jet peening
HSW	heat sink welding	WO	weld overlay
HWC	hydrogen water chemistry	WOL	wedge open load
HWC-M	hydrogen water chemistry - moderate	WS	weld sensitized
IASCC	irradiation assisted SCC	YS	yield stress
ICMH	in-core monitor housing	YSZ	yittria stabilized zirconia